

410 Rec'd PCT/PTO 29 JUN 2000

TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371

112134-00102

U.S. APPLICATION NO.

09/582556

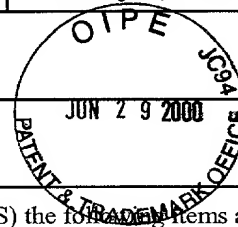
INTERNATIONAL APPLICATION NO.
PCT/GB99/00001INTERNATIONAL FILING DATE
January 4, 1999PRIORITY DATE CLAIMED
January 3, 1998

TITLE OF INVENTION

BALL GAME APPARATUS

APPLICANT(S) FOR DO/EO/US

Jan Abram VAN ASSELT



Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This express request to begin national examination procedures (35 U.S.C. 371(f) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date. Copy of Report transmitted herewith.
5. ☒ A copy of the International Application is filed (35 U.S.C. 371(c)(2))
 - a. ☐ is transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☒ has been transmitted by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
6. ☐ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ have been transmitted by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☒ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. below concern document(s) or information included:

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A **FIRST** preliminary amendment.
☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and/or address letter.
16. ☒ Other items or information:

REQUEST

PUBLISHED APPLICATION WO99/34884 WITH SEARCH REPORT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

U.S. APPLICATION NO. 09/582556		INTERNATIONAL APPLICATION NO. PCT/GB99/00001		ATTORNEY'S DOCKET NO. 112134-0010	
--	--	---	--	--------------------------------------	--

17. <input checked="" type="checkbox"/> The following fees are submitted:				CALCULATIONS PTO USE ONLY	
BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)): Search Report has been prepared by the EPO or JPO \$ 840.00 International preliminary examination fee paid to USPTO (37 CFR 1.482) \$ 670.00 No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2)) Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$ 970.00 International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4) ENTER APPROPRIATE BASIC FEE AMOUNT =				\$ 840.00	
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total Claims	10- 20 =	0	X \$18.00	\$	
Independent Claims	1- 3 =	0	X \$78.00	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$260.00	\$	
TOTAL OF ABOVE CALCULATIONS =				\$ 840.00	
Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28).					
SUBTOTAL =				\$ 840.00	
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				+	\$
TOTAL NATIONAL FEE =				\$ 840.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28,3.31). \$40.00 per property				+	\$
TOTAL FEES ENCLOSED =				\$ 840.00	
				Amount to be refunded:	\$
				charged:	\$

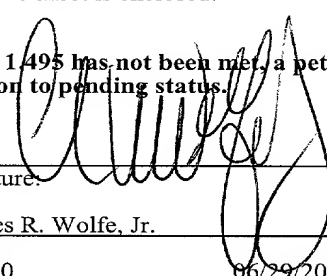
a. ☒ A check in the amount of \$ 840.00 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees.
 A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment
 to Deposit Account No. 23-2185. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:
 CUSTOMER NO.: 002779
 BLANK ROME COMISKY & MCCAULEY LLP
 900 - 17th Street, N.W., SUITE 1000
 Washington, D.C. 20006

Signature: 

Charles R. Wolfe, Jr.

28,680 06/29/2000
 Registration No. / Date

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: JAN ABRAHAM VAN ASSELT

GAU:

SERIAL NO:

EXAMINER:

FILED:

FOR: BALL GAME APPARATUS

SMALL ENTITY DECLARATION - INDEPENDENT INVENTOR

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention described in

- ☐ the specification filed herewith.
- ☐ the application or patent described above.

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as either an independent inventor under 37 CFR 1.9(c) if that person had made the invention, a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- ☒ no such person, concern or organization.
- ☐ persons, concerns or organizations listed below. (NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities, 37 CFR 1.27)

Full Name	Address	Individual	Small Business Concern	Nonprofit Organization

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate; 37 CFR 1.28(b).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Name

Signature

Date

JAN ABRAHAM VAN ASSELT

28 June 2000

09/582556T

410 Rec'd PCT/PTO 29 JUN 2000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Jan Abram Van ASSELT

Serial No. To Be Assigned

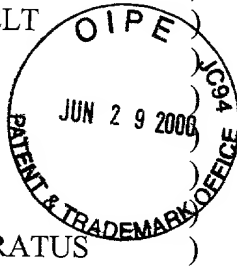
Filed: June 29, 2000

For: BALL GAME APPARATUS

Group Art Unit: Not Yet Assigned

Examiner: Not yet Assigned

Atty. Docket No.: 112134-00102



PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Applications Branch
Washington, D.C. 20231

Sir:

Prior to calculating the filing fee of the attached application, please amend the application as follows:

IN THE CLAIMS

In Claims 3, 4, 5, 6, 8, 9 and 10, line 1, change "any one of the preceding claims" to -- Claim 1--.

REMARKS

The claims have been amended to remove the multiple dependency.

Respectfully submitted,

ATTORNEY FOR APPLICANT

By:

Charles R. Wolfe, Jr.
Registration No. 28,780

Dated: June 29, 2000

BLANK ROME COMISKY & McCAULEY LLP
Wigman, Cohen, Leitner & Myers IP Group
The Farragut Building
900 17th Street, N.W., Suite 1000
Washington, D.C. 20006
202-463-7700

2/PRT

1

09/582556
430 Rec'd PCT/PTO 29 JUN 2000BALL GAME APPARATUS

This invention relates to apparatus for use in playing and practising ball games. More especially, but not exclusively, the invention relates to apparatus for improving the skills of participants in ball games.

The term "ball games" as used herein embraces games such as tennis, base ball, golf, badminton and the like, in which a projectile such as a ball, shuttlecock or the like is propelled by a racquet, stick, club or the like.

In the field of competitive sport it is a well known adage that practice makes perfect. Thus, for example, tennis players spend many hours improving *inter alia* forward and backhand strokes on tennis courts.

In the field of tennis, there are several inanimate tennis trainers available, these including *inter alia*, a ball attached by an elasticated strand, string or rope to some form of central support. Such trainers are unsatisfactory because the ball approaches the player at an unrealistic angle and speed. Furthermore, *missing* the ball results in the elasticated strand, string or rope becoming inconveniently entangled around the support.

Children also enjoy ball games, but unless they are coached, they have even less opportunity of improving their skills. Furthermore, few children have sufficient space and freedom from houses and cars to play ball games unrestrictedly.

Disabled persons, especially those confined to wheelchairs and who do not have the mobility of an able bodied person, cannot play conventional ball games and find obvious difficulties with currently available tennis

trainers and the like.

Similar problems arise with other ball games.

US-A-4,138,107 relates to a ball game practice device which comprises a ball connected to an elastic tether, the tether connected at either end to a carriage member which runs along a rigid rail. It is the elastic nature of the tether which after full stretch, returns the ball to the player.

US-A-3,630,521 relates to a baseball batting practice device. Once again, a ball is connected to an elastic cord which is slidably linked to an upper and lower support wire. In both these disclosures, the elastic nature of the tether to the ball allows somewhat uncontrolled lateral movement of the ball once struck by the player.

Therefore, there is a need to provide apparatus for simulating ball games which can be adapted for one or more players, which is suitable for adults, children and disabled persons, which is economical to produce and which can be used in a controlled manner in relatively small areas without concern over surrounding buildings and cars.

The present invention sets out to provide such apparatus.

Accordingly, in one aspect the invention provides apparatus for use in playing and practising ball games which comprises upper and lower guideways, substantially inelastic reciprocating means connected to and freely movably along said upper and lower guideways, and a ball connected to said reciprocating means.

The term "substantially inelastic" as used herein applies to materials which have a very limited ability to stretch and change length when struck.

The upper guideway may be inclined. Also, the maximum height of the upper guideway above the lower guideway may be greater than the length of the reciprocating means. In this arrangement, when the reciprocating means is positioned at, or towards, one end of the guideways, a player may strike the ball and propel the reciprocating means forwardly along the guideways. However, when the length of the reciprocating means becomes limiting in relation to the distance between the upper and lower guideways, the reciprocating means decelerates, stops and is deflected back along the guideways towards the player.

Importantly, the reciprocating means are made from a substantially inelastic material. Not only does this ensure that the ball maintains a controlled horizontal trajectory regardless of the angle at which the player hits the ball, but the inelasticity of the reciprocating means ensures its length becomes limiting in relation to the distance between the upper and lower guideways thereby deflecting the ball back to the player.

The force required to strike the ball on the reciprocating means may be regulated by altering the position of the lower guideway relative to the upper guideway. Thus for example, moving one end of the lower guideway nearer to a point directly below an end of the upper guideway increases the speed and force of the ball approaching a player standing at a fixed point.

It is preferred that the ends of the lower guideway are adjustably engaged with the ground so that the force and speed of the ball on the reciprocating means may be varied according to the competence of the player.

In an alternative arrangement, the upper and lower guideways are substantially parallel. This arrangement is of especial interest to children and disabled persons where there is a common requirement for the ball to stay within defined limits. Wheelchair-bound persons may thus develop ball game

skills using this invention.

Typically, the ends of the upper, and optionally the lower guideway, are attached to a stable support. In particular, the stable support is a wall or pole.

The upper and lower guideways may lie in a plane which is generally normal to the ground or in a plane which is inclined thereto.

The reciprocating means may comprise a substantially inelastic upstanding line connected to the upper and lower guideways.

The invention also contemplates an embodiment wherein the reciprocating means comprises more than one substantially inelastic upstanding line, for example, wherein the reciprocating means comprises one substantially inelastic upstanding line connected to the upper guideway and another associated substantially inelastic upstanding line connected to the lower guideway.

The reciprocating means may be connected to the upper and lower guideways through a slide which may comprise a hinged clip, ring, rope slide or adjustable loop.

In one embodiment the upper and/or lower guideways and/or the reciprocating means are made of a low friction material such as plastics covered cord or wire. The upper and lower guideways and the reciprocating means may be made of the same material.

The invention also contemplates an embodiment where the upper and/or lower guideways are made of a substantially rigid material. By substantially rigid it is meant relatively inflexible. Therefore, one or both guideways may take the form of a plastics track which is capable of

receiving a runner to which the reciprocating means is connected.

The ball may be connected at any point along the reciprocating means. This affords the possibility of the apparatus being used as apparatus for any ball game. For example, the ball may be attached towards the middle point of the reciprocating means to simulate apparatus for playing tennis or baseball, or alternatively, the ball may be attached near the lower end of the reciprocating means to simulate apparatus for playing golf.

Accordingly, the ball may be chosen from *inter alia* a tennis ball, a baseball, a rounders ball, a shuttlecock, a cricket ball, a hockey ball, or a golf ball.

In another aspect, the invention provides apparatus for use in playing and practising ball games, comprising a ball suspended by a substantially inelastic upstanding line from an upper, generally horizontal or inclined elongate guideway and connected by the same or a second substantially inelastic upstanding line to a lower, generally horizontal or inclined elongate guideway.

The lower elongate guideway may be at ground level. The height of the ball above ground level may be adjustable.

The upper and lower guideways may lie in a plane which is generally normal to the ground or in a plane which is inclined thereto. One or each guideway may take the form of a string, rope or the like stretched between two spaced supports. The line may be coated with or formed from a material having relatively low friction properties, for example a plastics material.

The substantially inelastic upstanding line(s) may be connected to the upper and/or lower guideway by a slide in the form of, for example, a loop

or ring.

The invention will now be described by way of example only with reference to the following diagrammatic drawings, in which:-

Figure 1 is a side view in perspective of apparatus in accordance with the invention;

Figures 2 and 3 illustrate different ways of supporting the apparatus of Figure 1; and

Figure 4 is a side view in perspective of alternative apparatus in accordance with the invention.

The apparatus shown in Figure 1 takes the form of a tennis training aid, especially for one player. The apparatus comprises upper and lower guideways 1, 2 respectively, of plastics coated cord which are attached at their ends to two supports 3, 4 spaced approximately 10 metres apart. Typically, the heights of the supports above ground level are respectively two metres and three metres. Thus the height of the upper guideway 1 above ground level is greater at its point of connection to support 4 than at its point of connection to support 3. The supports 3, 4 are held in position by inclined guide ropes 5 attached to ground engaging pegs 6. The lower guideway 2 is fixed at ground level and the upper guideway 1 is inclined upwardly from the support 3. Two positions of the lower guideway are shown in Figure 1, these being shown in full line and broken line. A ball 7 is suspended by an inelastic line 8 to the upper guideway 1 and by an inelastic line 9 to the lower guideway 2. The line 8 is supported from the upper guideway 1 by a loop or ring 10 and the line 9 is connected to the lower guideway 2 by a loop or ring 11. The lines 8, 9 may be secured to the ball by stitching, stapling or any other means. In an alternative arrangement, a single inelastic line is used, this extending through or around

the periphery of the ball.

When the training aid is in use, a player stands near the lower guideway 2 at its point of connection to support 3 and strikes the ball with a racquet or the like using either forehand or backhand strokes. The starting positions of the ball and lines 8, 9 (and the guideway 2) are shown in full line to the left hand side of Figure 1 and the limiting positions are shown in broken line to the right hand side of Figure 1. The force of the strike sends the lines 8, 9 and the ball 7 along the upper and lower guideways 1, 2 towards the limiting position shown in broken line. Once the distance between the ends of the lines 8, 9 (the lower guideway 2 now being in its raised position shown in broken line) becomes limiting in relation to the distance between the upper and lower guideways, the lines 8, 9 slow down, stop and are deflected back along the upper and lower guideways to return to the player who can then strike the ball again.

Figures 2 and 3 illustrate different methods of supporting the apparatus e.g. attachment at one end to a wall 12 as in Figure 2 and attached between two walls 14 as shown in Figure 3.

The apparatus shown in Figure 4 illustrates an alternative embodiment in accordance with the invention and is especially designed for two players. In this embodiment, the upper and lower guideways 1, 2 are generally parallel so that a ball can be played at either end of the apparatus to send the lines 8, 9 along the upper and lower guideways 1, 2 to the other player.

It will be appreciated that the foregoing is merely exemplary of embodiments of the invention and that modifications can readily be made without departing from the scope of the invention.

Thus, the length of the upper and lower guideways may be greater or

less than 10 metres. Also, the single supports 3, 4 may be replaced by sideways spaced supports to provide greater access to the ball by a player or players. The upper and/or lower guideway 1 or 2 may be produced from a relatively rigid material and may comprise a length of, for example, plastics formed with a track which receives a runner to which the line 8 or 9 is attached.

As mentioned previously, the "ball" 7 may comprise a tennis ball, base ball, golf ball or like projectile such as a shuttlecock. The height of the ball 7 above ground level is therefore readily adjustable to simulate playing conditions for all of such games.

CLAIMS:

1. Apparatus for use in playing and practising ball games comprising upper and lower guideways, substantially inelastic reciprocating means connected to and freely moveable along said upper and lower guideways, and a ball connected to said reciprocating means.
2. Apparatus according to claim 1 wherein the upper guideway is inclined, the maximum height of the upper guideway above ground level being greater than the length of the reciprocating means.
3. Apparatus according to claim 1 wherein the upper and lower guideways are substantially parallel.
4. Apparatus according to any one of the preceding claims wherein the upper and lower guideways lie in a plane which is generally normal to the ground.
5. Apparatus according to any one of the claims 1 to 3 wherein the upper and lower guideways lie in a plane which is inclined to the ground.
6. Apparatus according to any one of the preceding claims wherein the upper and/or lower guideways are attached to a stable support.
7. Apparatus according to claim 6 wherein the stable support is a wall or pole.
8. Apparatus according to any one of the preceding claims wherein the lower guideway is adjustably engaged with the ground.
9. Apparatus according to any one of the preceding claims wherein the

reciprocating means comprises one or more upstanding line(s) connected to the upper and lower guideways.

10. Apparatus according to claim 9 wherein the reciprocating means comprises one upstanding line connected to the upper guideway and another associated upstanding line connected to the lower guideway.
11. Apparatus according to any one of the preceding claims wherein the reciprocating means is connected to the upper and lower guideways means through a slide.
12. Apparatus according to claim 11 wherein the slide comprises a hinged clip, ring, rope slide or adjustable loop.
13. Apparatus according to any one of the preceding claims wherein the upper and lower guideways and/or the reciprocating means are made of a low friction material.
14. Apparatus according to claim 13 wherein the upper and lower guideways and/or the reciprocating means are made of plastics covered cord or wire.
15. Apparatus according to any one of the preceding claims wherein the upper and lower guideways and the reciprocating means are made from the same material.
16. Apparatus according to any one of the preceding claims wherein the upper and lower guideways are made of a substantially rigid material.
17. Apparatus according to claim 16 wherein the upper and/or lower guideways take the form of a plastics track which is capable of receiving a runner to which the reciprocating means is connected.

18. Apparatus according to any one of the preceding claims wherein the ball can be connected at any point along the reciprocating means.
19. Apparatus according to any one of the preceding claims wherein the ball is a tennis ball, a baseball, a rounders ball, a cricket ball, a hockey ball, or a golf ball.
20. Apparatus for use in playing and practising ball games, comprising a ball suspended by a substantially inelastic upstanding line from an upper, generally horizontal or inclined elongate guideway and connected by the same or a second substantially inelastic upstanding line to a lower, generally horizontal or inclined elongate guideway.
21. Apparatus according to claim 20 wherein the upper and lower guideways lie in a plane which is generally normal to the ground or in a plane which is inclined thereto.
22. Apparatus according to claim 20 or claim 21 wherein the upper and/or lower guideway comprises a guideway in the form of a string, rope or the like stretched between two spaced supports.
23. Apparatus according to any one of the claims 20 to 22 wherein the upper and/or lower guideways and/or upstanding line(s) is/are coated with or formed from a material being of relatively low friction properties.
24. Apparatus according to claim 23 wherein the upper and/or lower guideways and/or upstanding line(s) is/are coated with or formed from a plastics material.
25. Apparatus according to any one of the claims 20 to 24 wherein the upstanding line(s) is/are connected to the upper and/or lower

guideway by a slide.

26. Apparatus according to claim 25 wherein the slide comprises a loop or ring.
27. Apparatus as defined hereinabove and with reference to the accompanying diagrammatic drawings.

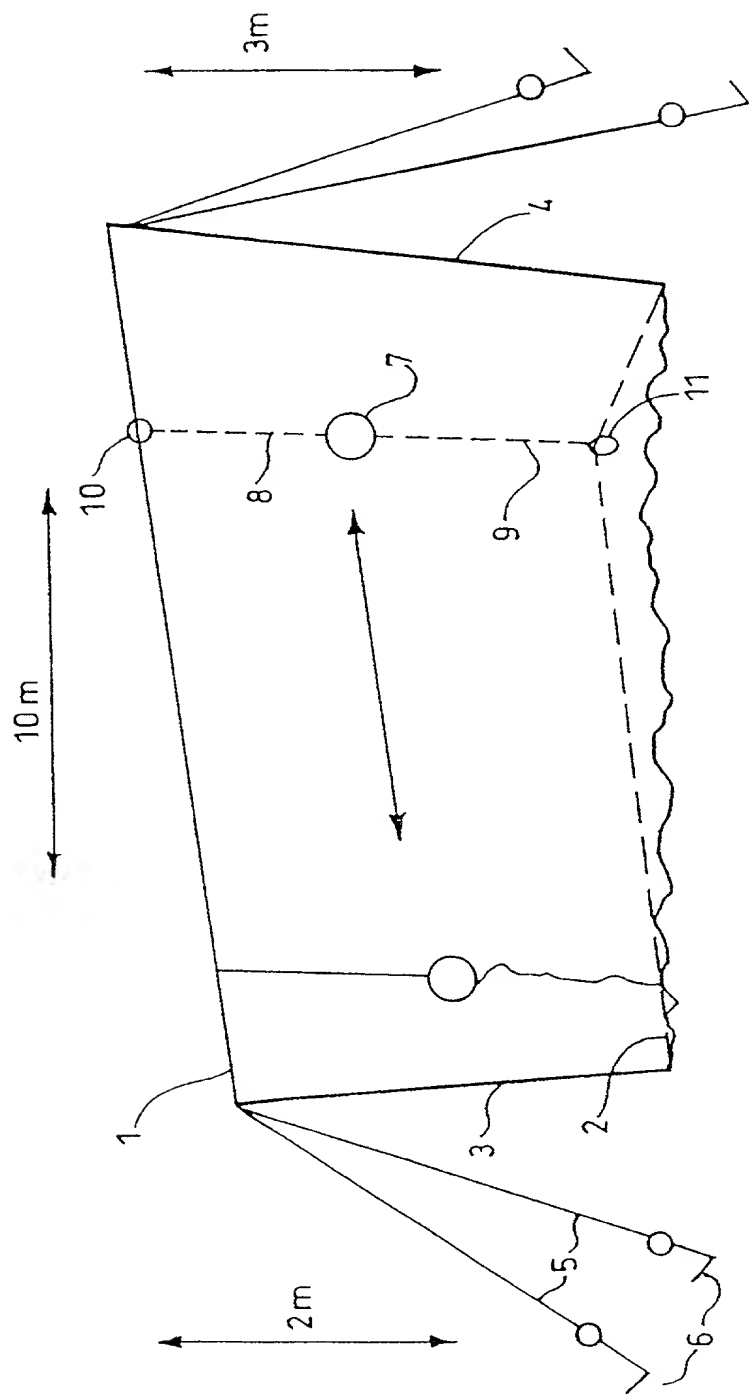


FIG.1.

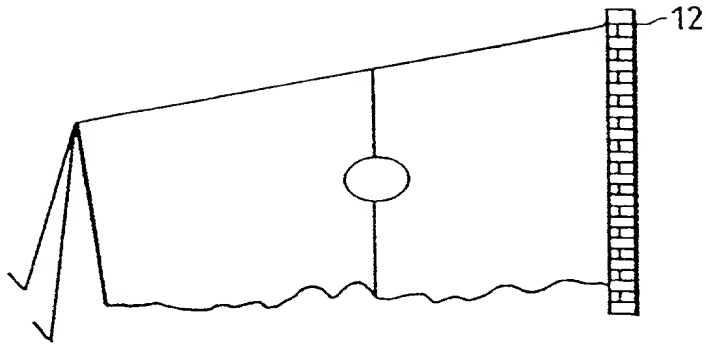


FIG. 2.

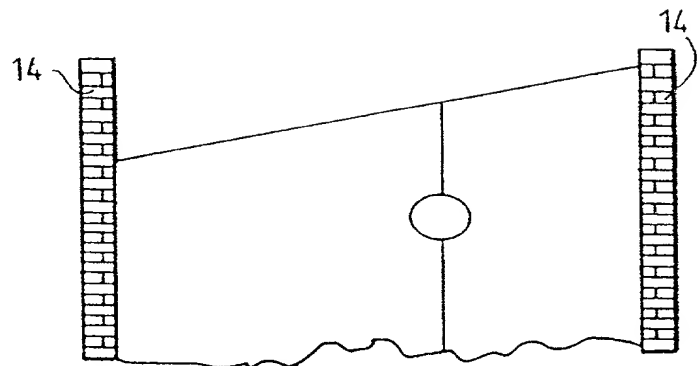


FIG. 3.

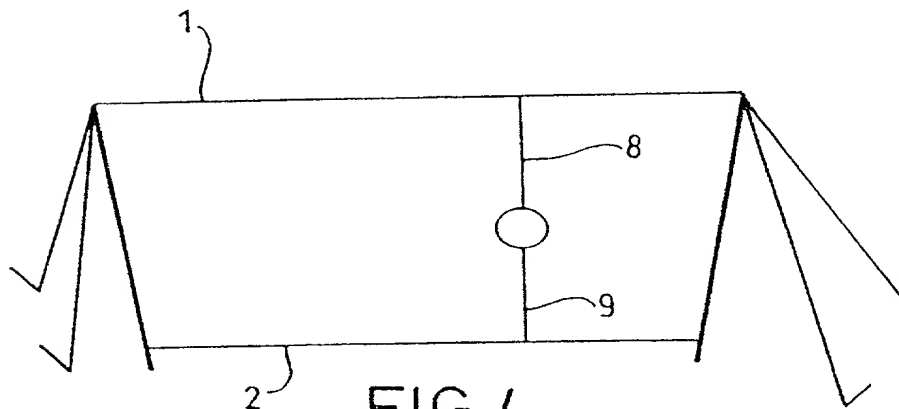


FIG. 4.

DECLARATION FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

BALL GAME APPARATUS

the specification of which

☐ is attached hereto

* ☐ was filed on _____ as United States Application Number or PCT International Application Number _____ and (if applicable) was amended on _____

I hereby authorize our attorneys to insert the serial number assigned to this application.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56.

I hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

PRIOR FOREIGN/PCT APPLICATION(S) AND ANY PRIORITY CLAIMS UNDER 35 USC §119			
APPLICATION NO.	COUNTRY	DAY/MONTH/YEAR FILED	PRIORITY CLAIMED
9800015.1	Great Britain	03.01.1998	Yes

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

PROVISIONAL APPLICATION(S) UNDER 35 U.S.C. §119(e)	
APPLICATION NUMBER	FILING DATE

I hereby claim the benefit under 35 U.S.C. §120 of any United States application, or §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. §112.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

PRIOR U.S./PCT INTERNATIONAL APPLICATION(S) DESIGNATED FOR BENEFIT UNDER 37 U.S.C. §120		
APPLICATION NO.	FILING DATE	STATUS — PATENTED, PENDING, ABANDONED
* PCT/GB99/00001	04.01.1999	Pending

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith: Herbert Cohen, Reg. No. 25,109; Victor M. Wigman, Reg. No. 25,201; George C. Myers, Jr., Reg. No. 27,040; Donald R. Greene, Reg. No. 22,470; Michael C. Greenbaum, Reg. No. 28,419; Charles R. Wolfe, Jr., Reg. No. 28,680; Michael D. White, Reg. No. 32,795; Karl O. Neidert, Reg. No. 39,313; David J. Edmondson, Reg. No. 35,126; Denise C. Lane, Reg. No. 42,780; Carl Schaukowitch, Reg. No. 29,211; James E. Howard, Reg. No. 39,715; Peter Weissman, Reg. No. 40,220 and Nicholas Bromer, Reg. No. 33,478.

Correspondence Address:

~~BLANK ROME COMISKY & MCCAULEY, LLP~~
~~The Farragut Building~~
~~Suite 1000~~
~~900 17th Street, NW~~
~~Washington, DC 20006~~
~~TEL (202) 530-7400~~
~~FAX (202) 463-6915~~

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of sole or first inventor (given name, family name)	
JAN ABRAHAM VAN ASSELT	
Signature	Date 28 June 2000
Residence The Spinney, Mynthurst, Leigh, Reigate, Surrey RH2 8RJ, Great Britain	Citizenship British
Post Office Address	
Full Name of additional joint inventor (given name, family name)	
Signature	Date
Residence	Citizenship
Post Office Address	
Full Name of additional joint inventor (given name, family name)	
Signature	Date
Residence	Citizenship
Post Office Address	
Full Name of additional joint inventor (given name, family name)	
Signature	Date
Residence	Citizenship
Post Office Address	
Full Name of additional joint inventor (given name, family name)	
Signature	Date
Residence	Citizenship
Post Office Address	

☐ Additional joint inventors are named on separately numbered sheets attached hereto.